

I. Amendments to the Claims

1. (Previously Presented) A pedestrian detection system for a motor vehicle having a hood generally extending from the front of the vehicle to a windshield of the vehicle, the detection system comprising: a first sensor arrangement located more than 0.5 metres behind the front of the vehicle to detect at least one of the speed and the distance to a part of an object located in front of the vehicle, the part of the object extending above a predetermined height, the predetermined height being at least the height of a front edge of the hood; and a second sensor arrangement mounted at the front of the vehicle responsive to an impact of the vehicle with the object, the detection system is cooperatively configured with a pedestrian protection arrangement to activate the pedestrian protection arrangement in response to the first sensor arrangement detecting at least one of a distance below a threshold distance and a speed above a threshold speed, wherein the pedestrian protection arrangement has at least two modes of activation.

2. (Previously Presented) A system according to Claim 1 wherein the first sensor arrangement is a microwave radar sensor.

3. (Previously Presented) A system according to Claim 1 wherein the first sensor arrangement is an infra-red radar sensor.

4. (Original) A system according to Claim 1 wherein the first sensor arrangement is a camera.

5. (Original) A system according to Claim 4 wherein the camera operates in the visible spectrum.

6. (Previously Presented) A system according to Claim 4 wherein the camera operates in the infra-red spectrum.

7. (Original) A system according to Claim 1 wherein the first sensor arrangement is a stereo-camera arrangement.

8. (Previously Presented) A system according to Claim 1 wherein the first sensor arrangement is mounted on the exterior of the vehicle in front of the windshield provided on the vehicle.

9. (Previously Presented) A system according to Claim 1 wherein the first sensor arrangement is mounted on the vehicle behind the windshield.

10. (Previously Presented) A system according to Claim 1 wherein the first sensor arrangement is mounted above the windshield.

11. (Cancelled)

12. (Previously Presented) A system according to Claim 1 wherein the threshold distance is less than the distance between the first sensor arrangement and the front of the vehicle.

13. (Previously Presented) A system according to any Claim 1 wherein the second sensor arrangement includes an accelerometer.

14. (Previously Presented) A system according to Claim 13 wherein the accelerometer is configured to provide a signal indicative of a crash situation and wherein, upon receipt of the signal, an internal safety device on the vehicle is actuated.

15. (Previously Presented) A system according to Claim 1 wherein the second sensor arrangement includes a contact sensor mounted at the front of the vehicle.

16. (Previously Presented) A system according to Claim 1 wherein the second sensor arrangement is a sensor that can discriminate objects lighter than a pedestrian.

17. (Previously Presented) A system according to Claim 1 wherein the pedestrian protection arrangement is activated only if the first sensor arrangement detects at least one of a distance to the object below the threshold distance and a speed above the threshold speed, and also in the event the second sensor arrangement detects the object.

18. (Cancelled)

19. (Previously Presented) A system according to Claim 1 wherein the pedestrian protection arrangement incorporates at least two pedestrian protection devices.

20. (Previously Presented) A system according to Claim 1 wherein the pedestrian protection arrangement incorporates a first lifter to lift a front part of the hood, and a second lifter to lift a rear part of the hood, one mode of activation of the at least two modes of activation being the lifting of the front part of the hood, and another mode of activation of the at least two modes of activation including additionally the lifting of a rear part of the hood.

21. (Previously Presented) A system according to Claim 1 wherein the pedestrian protection arrangement includes a mechanism to lift the rear part of the hood, and at least one air-bag to cover part of the windshield or a portion of an A-Pillar provided on the vehicle, one mode of activation of the at least two modes of activation comprising the lifting of only the rear part of the hood, and another mode of activation of the at least two modes of activation including additionally the activation of at least one of the air-bags.

22. (Previously Presented) A system according to Claim 1 wherein different modes are activated in response to a signal dependent on the first sensor arrangement reaching different thresholds.

23. (Previously Presented) A system according to Claim 22 wherein at least one of the different thresholds is dependent upon the speed of the vehicle as measured by a third sensor arrangement.